FORD CANYON WASH FCD GAGE ID# 5428

STATION DESCRIPTION

<u>LOCATION</u> – The gage is located within White Tanks Regional Park, about 3 miles past the park entrance. The gaging equipment is located on a wash about 1/4 mile past Ford Canyon Road. Latitude N 33° 35' 47.5"; Longitude W 112° 29' 57.7". Located in the NW1/4 SE1/4 SE1/4 S18 T3N R2W in the Waddell 7.5-minute quadrangle.

ESTABLISHMENT – Gaging was established on February 5, 2002.

DRAINAGE AREA – The drainage area is about 4.3 mi².

GAGE – The gage is a pressure transducer type instrument. The transducer diaphragm is at elevation 0.72 feet gage height, levels of April 1, 2003.

There is one crest gage at this location. The pin elevation is 1.33 feet gage height, levels of April 1, 2003.

There is no staff gage at this location.

ZERO GAGE HEIGHT – Zero gage height is defined as an elevation currently below the channel bottom at elevation 1,468.00 feet NAVD 1988.

HISTORY – No previous history at this location. Gaging established on February 5, 2002. A crest gage was installed in July 2002.

REFERENCE MARKS -

RM-FCYN is an FCD brass cap located about 10 feet from the gage standpipe. Elevation 7.21 feet gage height, or 1,475.21 feet NAVD 88, levels of February 13, 2002. Northing 945058.094 feet and Easting 522611.537 feet.

<u>CHANNEL AND CONTROL</u> – The channel is straight for about 400 feet downstream from the gage. Past 400 feet downstream, the channel becomes an alluvial fan.

The channel bottom is a mix of sand and cobbles. Both banks are vegetated with moderate mesquite, greasewood, and palo verde. Low flows are controlled by local riffles. Above about 1.5 feet gage height, the channel is control for all flows to about 7 feet gage height.

<u>RATING</u> – The current rating is Rating #1, applied as of gage installation. The rating is based on survey data from three cross sections. An HEC-RAS model was developed from the survey data.

<u>DISCHARGE MEASUREMENTS</u> – Indirect discharge measurements could be made in the three cross-section (1-3) reach at the gage. Direct measurements could be made by wading the channel at low flows. Each of the three cross sections is monumented with rebar at each bank as described below.

Cross-section one is located at the gage. XS1LB is the left bank rebar marker. It has elevation 1,475.57 feet NAVD 1988. XS1RB is the right bank rebar marker. It has elevation 1,475.87 feet NAVD 1988.

Cross-section two is located about 150 feet downstream of the gage. XS2LB is the left bank rebar marker. It has elevation 1,473.04 feet NAVD 1988. XS2RB is the right bank rebar marker. It has elevation 1,472.12 feet NAVD 1988.

Cross-section three is located about 390 feet downstream from the gage. XS3LB is the left bank rebar marker. It has elevation 1,466.31 feet NAVD 1988. XS3RB is the right bank rebar marker. It has elevation 1,467.38 feet NAVD 1988.

POINT OF ZERO FLOW – The PZF is at about -0.3 feet gage height, levels of April 1, 2003.

FLOODS – A flow of 740 cfs at 3.30 feet gage height was recorded on February 13, 2003.

REGULATION – None

DIVERSIONS – None known

ACCURACY – Fair

<u>UPDATE</u> - July 14, 2011 D E Gardner